

Measles: Key Facts and Questions & Answers

General Public

Key Facts

Measles, a once common childhood disease, is no longer widespread in the United States due to the success of this country's measles vaccination program. However, measles is still common in many countries of the world. Because of this, measles may still occur in the United States due to importations of measles from other countries. This can happen when visitors from other countries travel to the United States while infected with measles. It can also happen when U.S. residents become infected while traveling overseas. To prevent measles infections, it is important for the U.S. population to be vaccinated with the measles, mumps, and rubella (MMR) vaccine.

The Advisory Committee on Immunization Practices (ACIP) recommends that children receive the first dose of MMR vaccine at 12–15 months of age and the second dose between 4 to 6 years of age (or no sooner than 28 days after the first dose). All school and college students should receive two doses of MMR vaccine. Some adults should also get MMR vaccine: in general, anyone older than 18 years of age who was born in 1957 or later should get at least one dose of MMR vaccine unless they can show they had the vaccine or measles disease or they have a blood test that shows they are immune to measles.

Questions & Answers

What is measles?

Measles is a highly infectious respiratory disease caused by the measles virus.

What are the symptoms of measles?

Measles symptoms include rash, high fever, cough, runny nose, and red, watery eyes. These symptoms last about a week.

The disease can also cause severe illness and complications, such as diarrhea, ear infections, pneumonia, encephalitis (brain infection), seizures, and death. These complications are more common among children under 5 years of age and adults over 20 years of age.

How is measles spread?

Measles is highly contagious (spreads easily). When an infected person sneezes or coughs, droplets containing the virus spray into the air. Those droplets can land in other people's noses or throats when they breathe or if they put their fingers in their mouth or nose after handling an infected surface. The measles virus can survive for 2 hours in air or on surfaces.

It is also important to know that people with measles are infectious (can spread the disease) from 4 days before to 4 days after the rash appears. Thus, an infected person can spread the disease before knowing he or she is infected.

Is measles common in other parts of the world? What is the risk to US residents?

Measles is a common disease in many countries throughout the world. It is possible that people from other countries who visit the United States could be ill with measles. To prevent getting measles from overseas visitors, U.S. residents should make sure they have been appropriately vaccinated (see At what age should children get the MMR vaccine? and Do adults need to be vaccinated against measles?).

How can I protect my child and myself against measles?

The best protection against measles for individuals and the community is through routine immunization with MMR vaccine. This is a combined vaccine that protects against measles, mumps, and rubella.

In almost all cases, people who receive the MMR vaccine are protected against measles. However, in rare cases, people who get the vaccine can still become infected with measles if exposed to the virus. Two doses of MMR vaccine provide full protection against measles to 99 out of every 100 persons vaccinated.

At what age should children get the MMR vaccine?


Children should receive the first dose of MMR vaccine at 12–15 months of age and the second dose at 4–6 years of age (or no earlier than 28 days after the first dose). Older children who have not been vaccinated should receive two doses of MMR vaccine at least 28 days apart.

The recommended age for receiving MMR vaccine might change if there is a measles outbreak or if you will be traveling to a foreign country. In such cases, check with your child's health care provider to ensure that your child is properly vaccinated to protect against measles.

Do adults need to be vaccinated against measles?

All U.S. adults born during or after 1957 should also get at least one dose of MMR vaccine unless they can show they either had the vaccine or measles disease or have a blood test that shows they are immune to measles. For certain groups of adults (for example, those who provide health care), two doses of MMR vaccine are recommended. More specific recommendations for vaccinating adults can be found at CDC's [vaccination advice Web page](http://www.cdc.gov/vaccines/vpd-vac/measles/in-short-adult.htm#who) or go to <http://www.cdc.gov/vaccines/vpd-vac/measles/in-short-adult.htm#who>


Are there people who should not get the MMR vaccine?

Yes, some people should not get MMR vaccine or should wait before getting it. This includes persons with allergies to components of the vaccine and those with medical conditions that preclude vaccination. If you have further questions, discuss them with your health care provider. This information was taken from the [Vaccine Information Statement](http://www.cdc.gov/vaccines/pubs/vis/default.htm#mmr)  or go to Measles at <http://www.cdc.gov/vaccines/pubs/vis/default.htm#mmr>.

Is the MMR vaccine safe?

The MMR vaccine has been in use for more than three decades in the U.S., and reports of serious adverse events following vaccination have been extremely rare. As with all vaccines, there can be minor reactions from the MMR vaccine. These reactions might include pain and redness at the injection site, headache, fatigue, or a vague feeling of discomfort. When reports of severe vaccine-related adverse events are made, they are taken seriously and investigated appropriately.


It is important to know that the risk of MMR vaccine causing serious harm or death has been extremely small and that being vaccinated is much safer than getting any of the three diseases (measles, mumps, and rubella) the vaccine protects against.

Additional information about possible vaccine-related adverse events is available in the [Vaccine Information Statement](http://www.cdc.gov/vaccines/pubs/vis/default.htm#mmr)  or go to Measles at <http://www.cdc.gov/vaccines/pubs/vis/default.htm#mmr>.

Where can I find additional information?

General information about measles is available at CDC's [Vaccines and Preventable Diseases: Measles Disease In-Short](http://www.cdc.gov/vaccines/vpd-vac/measles/in-short-adult.htm) Web page or <http://www.cdc.gov/vaccines/vpd-vac/measles/in-short-adult.htm>.

Information about measles vaccination is available at CDC's [Vaccines and Preventable Diseases: Measles Vaccination](http://www.cdc.gov/vaccines/vpd-vac/measles/default.htm) Web page or <http://www.cdc.gov/vaccines/vpd-vac/measles/default.htm>.

Information about the measles, mumps, and rubella (MMR) vaccine is available provided in the [Vaccine Information Statement](http://www.cdc.gov/vaccines/pubs/vis/default.htm#mmr)  or go to Measles at <http://www.cdc.gov/vaccines/pubs/vis/default.htm#mmr>.

CDC. Measles, Mumps, and Rubella—Vaccine use and strategies for elimination of measles, rubella, and congenital rubella syndrome and control of mumps: Recommendations of the Advisory Committee on Immunization Practices (ACIP). [MMWR 1998;4\(No RR-8\):1–57](http://www.cdc.gov/mmwr/preview/mmwrhtml/00053391.htm) or <http://www.cdc.gov/mmwr/preview/mmwrhtml/00053391.htm>.